PURCHASE DESCRIPTION

TESTER, HIGH VOLTAGE

SCAT 4453

- 1.0 <u>GENERAL</u> This procurement requires a high voltage AC/DC tester for testing the insulation strength by applying a high voltage to the sample and measuring the leakage current.
- 2.0 <u>CLASSIFICATION</u> The equipment shall meet the requirements of MIL-PRF-28800F, class 3, for Navy shipboard, submarine and shore applications.
- 3.0 <u>OPERATIONAL REQUIREMENTS</u> The equipment shall be capable of providing AC and DC test voltages to a sample and monitoring the voltage and current within the parameters specified below.
- 3.1 <u>Test Voltages</u>
- 3.1.1 AC: 0 to 10000 V 3.1.2 DC: 0 to 25000 V
- 3.2 Monitor
- 3.2.1 Voltage Meter
- 3.2.1.1 Range: 0V to 25 kV in two or more ranges
- 3.2.1.2 Accuracy: Within ± 2% of range selected
- 3.2.2 Current Meter
- 3.2.2.1 Range: 0 to 5 mA
- 3.2.1.2 Accuracy: Within ± 2% of range selected
- 3.3 <u>Breakdown Current</u> 5 mA maximum (any test voltage)
- 3.3.1 Failure Indicator: Audible and visible indication of breakdown.
- 3.4 <u>Overload Indicator</u>
- 3.4.1 Sensitivity: Adjustable range from 50 µA to 5 mA
- 4.0 GENERAL REQUIREMENTS
- 4.1 Power: MIL-PRF-28800F nominal power requirements: 300 watts maximum.
- 4.2 Weight: 34 kg (75 lbs) maximum.
- 4.3 <u>Lithium Batteries</u>: Per MIL-PRF-28800F, lithium batteries are prohibited without prior authorization. Requests for approving the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.
- 4.4 Technical manual Technical manuals shall be conformed to standard MIL-PRF-28800F.

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A Use and Installation manual (Operator's Manual) shall be provided separately. The Maintenance and servicing manual shall be provided with all three levels of maintenance; unit operational verification, module level, and component level. Technical manuals shall be provided in both printed and electronic formats. The printed format shall be otherwise normally provided. The electronic format shall consist of the installation programs for the latest version of Adobe Acrobat for all computer platforms for which Acrobat is available and the technical manual in an electronic form that is readable through use of the Adobe Acrobat application.

- 4.5 <u>Calibration Interval</u> The calibration interval shall be 12 months minimum. The equipment shall be with in all accuracy requirements specified herein, with a 72% or greater confidence factor following a calibration interval of 12 months.
- 4.6 <u>Supplemental identification plate</u> A supplemental identification plate is required and shall indicate the following:
 - a. Manufacturers name and/or cage
 - b. Part or model number
 - c. Serial number
 - d. National stock number
 - e. Contract number
 - f. "Part of" or "P/O" military nomenclature